BISS Biodiversity Information Science and Standards

Biodiversity Information Science and Standards 2: e26278
doi: 10.3897/biss.2.26278

OPEN ACCESS

Conference Abstract

# Revising the Dead Art of Skeleton Preparation for Today's Museum Collections

Judith Streat ‡

‡ Otago Museum, Dunedin, New Zealand

Corresponding author: Judith Streat (jstreat@xtra.co.nz)

Received: 30 Apr 2018 | Published: 15 Jun 2018

Citation: Streat J (2018) Revising the Dead Art of Skeleton Preparation for Today's Museum Collections. Biodiversity Information Science and Standards 2: e26278. https://doi.org/10.3897/biss.2.26278

## Abstract

Many museums have an eclectic mix of skeletons in their collections. These curiosities from across the globe were processed from the carcass using a variety of techniques with varying degrees of success. The details of how these animals have journeyed from death to collection item are scarce.

The old techniques and skill involved in constructing skeletons, from large down to the most delicate and tiny, can still be marveled at today. However some skeletons were poorly articulated, others incomplete or put together borrowing bones from another animal or bird. In the case of animals not known as live specimines ignorance may have been a factor in achieving an incorrect stance while other specimines were intentionally exaggerated to impress rather than appear true to nature.

A selection of methods for the preparation of skeletons have been used, such as carcinogenic chemicals, bleaches, detergents and solvents, fresh and seawater maceration, flesh-eating dermestid beetles, boiling bones to remove the oils and flesh, and composting. Skeletons were articulated for display by drilling and pinning the bones, sometimes using irreversible glues or ferrous wire that rusted over time.

Over the past 18 years I have prepared and articulated native bird and marine mammal skeletons for the Otago Museum collection. To ensure the bones are not contaminated by

© Streat J. This is an open access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

chemicals or physically damaged, methods and requirements have evolved over a relatively short time, as conservation has become an integral part of museum practice.

This presentation will provide an overview of the fresh water maceration process, some lessons learnt, the articulation method developed using an external stainless steel wire armature to hold each bone in position, and organizing bones with safety, articulation and transportation in mind. I will share the journey from corpse to collection item of Autahi the leopard seal and other skeletons I have worked with.

## Keywords

skeleton preparation, maceration, detergents, conservation, dermestids

## Presenting author

Judith Streat

## Hosting institution

Otago Museum